Amendments to the Claims

1. (Original) A phosphate derivative of a phenolic hydroxy compound comprising the reaction product of the following steps:

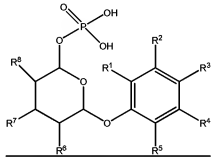
(a) reacting the phenolic hydroxy compound with an alkyl α:ω dialdehyde or a sugar-like polyhydroxy dialdehyde to form a hemiacetal;

(b) reducing the terminal aldehyde group on the product from step (a) to a hydroxyl group; and

(c) phosphorylating the hydroxyl group formed in step (b) to produce a phosphate derivative of the phenolic hydroxy compound.

2. (Cancelled)

3. (Currently amended) The phosphate derivative of a phenolic hydroxy compound according to claim 1 having the structure of Compound (II)



wherein R^1, R^2, R^3, R^4 and R^5 ~~may~~ are each independently ~~be chosen from~~ H or an alkyl group and R^6, R^7 and R^8 ~~can~~ are each independently ~~be~~ H or OH.

4. (Currently amended) The phosphate derivative of a phenolic hydroxy compound according to claim 1 wherein the product of step (c) ~~has been~~ is reacted with a complexing agent selected from the group ~~comprising amphoteric surfactants, cationic surfactants, amino acids having nitrogen functional groups and proteins rich in these amino acids~~ consisting of arginine or a substituted amine of the following formula:

$NR^9R^{10}R^{11}$

wherein R^9 is chosen from the group consisting of straight or branched chain mixed alkyl radicals from C6 to C22 and carbonyl derivatives thereof, and

R^{10} and R^{11} are chosen independently from the group comprising H, $-CH_2(CO)OX$, $-CH_2CH(OH)CH_2SO_3X$, $-CH_2CH(OH)CH_2OPO_3X_2$, $-CH_2CH_2COOX$, $-CH_2CH_2CH(OH)CH_2SO_3X$ or $-CH_2CH_2CH(OH)CH_2OPO_3X_2$, wherein X is H, Na, K or alkanolamine provided R^{10} and R^{11} are not both H; and

wherein when R^9 is $R^9(CO)$, wherein R^9 is chosen from the group consisting of straight or branched chain mixed alkyl radicals from C6 to C22 and carbonyl derivatives thereof, and R^{10} is $-CH_3$ and R^{11} is $-(CH_2CH_2)N(CH_2CH_2(OH))CH_2PO_3H$ or R^{10} and R^{11} are independently $-(CH_2)_2N(CH_2CH_2(OH))CH_2(CO)OX$, wherein X is H, Na, K or alkanolamine.

5. (Currently amended) The phosphate derivative of a phenolic hydroxy compound according to claim 1 wherein the phenolic hydroxy compound is propofol ~~or a derivative of propofol~~.

6. (Currently amended) The phosphate derivative of a phenolic hydroxy compound according to claim 5 wherein ~~the phosphate derivative of~~ propofol ~~has been~~ is reacted with a complexing agent selected from the group ~~comprising amphoteric surfactants, cationic surfactants, amino acids having nitrogen functional groups and proteins rich in these amino acids~~ consisting of arginine or a substituted amine of the following formula:

$NR^9R^{10}R^{11}$

wherein R^9 is chosen from the group consisting of straight or branched chain mixed alkyl radicals from C6 to C22 and carbonyl derivatives thereof, and

R^{10} and R^{11} are chosen independently from the group comprising H, $-CH_2(CO)OX$, $-CH_2CH(OH)CH_2SO_3X$, $-CH_2CH(OH)CH_2OPO_3X_2$, $-CH_2CH_2COOX$, $-CH_2CH_2CH(OH)CH_2SO_3X$ or $-CH_2CH_2CH(OH)CH_2OPO_3X_2$, wherein X is H, Na, K or alkanolamine provided R^{10} and R^{11} are not both H; and

wherein when R^9 is $R^9(CO)$, wherein R^9 is chosen from the group consisting of straight or branched chain mixed alkyl radicals from C6 to C22 and carbonyl derivatives thereof, and R^{10} is $-CH_3$ and R^{11} is $-(CH_2CH_2)N(CH_2CH_2(OH))CH_2PO_3H$ or R^{10} and R^{11} are independently $-(CH_2)_2N(CH_2CH_2(OH))CH_2(CO)OX$, wherein X is H, Na, K or alkanolamine.

7. (Original) The phosphate derivative of a phenolic hydroxy compound according to claim 6 wherein the complexing agent is arginine.

8. (Original) The phosphate derivative of a phenolic hydroxy compound according to

claim 6 wherein the complexing agent is disodium lauryl-imino-dipropionate.

9. (Currently amended) The phosphate derivative of a phenolic hydroxy compound according to claim 1 wherein the alkyl α:ω dialdehyde or a the sugar-like polyhydroxy dialdehyde is selected from the group consisting of gluteraldehyde, trihydroxy pentandial, glyoxyal and mixtures thereof.

10. (Currently amended) The phosphate derivative of a phenolic hydroxy compound of claim 1 wherein the phenolic hydroxy compound is selected from the group consisting of adrenaline, analgesics, and mixtures thereof.

11. (Original) A method for preparing a phosphate derivative of a phenolic hydroxy compound comprising the steps of:

(a) reacting the phenolic hydroxy compound with an alkyl α:ω dialdehyde or a sugar-like polyhydroxy dialdehyde to form a hemiacetal;

(b) reducing the terminal aldehyde group on the product from step (a) to a hydroxyl group; and

(c) phosphorylating the hydroxyl group formed in step (b) to produce a phosphate derivative of the phenolic hydroxy compound.

12. (Currently amended) The method according to claim 11 further comprising step (d) reacting the product of step (c) with a complexing agent selected from the group ~~comprising amphoteric surfactants, cationic surfactants, amino acids having nitrogen functional groups and proteins rich in these amino acids~~ consisting of arginine or a substituted amine of the following formula:

$NR^9R^{10}R^{11}$

wherein R^9 is chosen from the group consisting of straight or branched chain mixed alkyl radicals from C6 to C22 and carbonyl derivatives thereof, and

R^{10} and R^{11} are chosen independently from the group comprising H, $-CH_2(CO)OX$, $-CH_2CH(OH)CH_2SO_3X$, $-CH_2CH(OH)CH_2OPO_3X_2$, $-CH_2CH_2COOX$, $-CH_2CH_2CH(OH)CH_2SO_3X$ or $-CH_2CH_2CH(OH)CH_2OPO_3X_2$, wherein X is H, Na, K or alkanolamine provided R^{10} and R^{11} are not both H; and

wherein when R^9 is $R^9(CO)$, wherein R^9 is chosen from the group consisting of straight or branched chain mixed alkyl radicals from C6 to C22 and carbonyl derivatives thereof, and R^{10} is

$-CH_3$ and R^{11} is $-(CH_2CH_2)N(CH_2CH_2(OH))CH_2PO_3H$ or R^{10} and R^{11} are independently $-(CH_2)_2N(CH_2CH_2(OH))CH_2(CO)OX$, wherein X is H, Na, K or alkanolamine.

13. (Currently amended) The method according to claim 11 wherein the phenolic hydroxy compound is propofol ~~or a derivative of propofol~~.

14. (Currently amended) The method according to claim 13 comprising the further step of reacting ~~the phosphate derivative of~~ propofol with a complexing agent selected from the group ~~comprising amphoteric surfactants, cationic surfactants, amino acids having nitrogen functional groups and proteins rich in these amino acids~~ consisting of arginine or a substituted amine of the following formula:

$NR^9R^{10}R^{11}$

wherein R^9 is chosen from the group consisting of straight or branched chain mixed alkyl radicals from C6 to C22 and carbonyl derivatives thereof, and

R^{10} and R^{11} are chosen independently from the group comprising H, $-CH_2(CO)OX$, $-CH_2CH(OH)CH_2SO_3X$, $-CH_2CH(OH)CH_2OPO_3X_2$, $-CH_2CH_2COOX$, $-CH_2CH_2CH(OH)CH_2SO_3X$ or $-CH_2CH_2CH(OH)CH_2OPO_3X_2$, wherein X is H, Na, K or alkanolamine provided R^{10} and R^{11} are not both H; and

wherein when R^9 is $R^9(CO)$, wherein R^9 is chosen from the group consisting of straight or branched chain mixed alkyl radicals from C6 to C22 and carbonyl derivatives thereof, and R^{10} is $-CH_3$ and R^{11} is $-(CH_2CH_2)N(CH_2CH_2(OH))CH_2PO_3H$ or R^{10} and R^{11} are independently $-(CH_2)_2N(CH_2CH_2(OH))CH_2(CO)OX$, wherein X is H, Na, K or alkanolamine.

15. (Original) The method according to claim 14 wherein the complexing agent is arginine.

16. (Original) The method according to claim 14 wherein the complexing agent is disodium lauryl-imino-dipropionate.

17. (Currently amended) The method according to claim 11 wherein the alkyl α:ω dialdehyde or a the sugar-like polyhydroxy dialdehyde is selected from the group consisting of gluteraldehyde, trihydroxy pentandial, glyoxyal, and mixtures thereof.

18. – 22. (Cancelled)

23. (Currently amended) A prodrug comprising a phosphate derivative of a phenolic hydroxy compound according to claim 3 ~~any one of claims 1 to 8 when used as a prodrug~~.

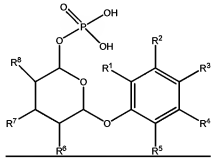
24. (Currently amended) An anaesthetic comprising a phosphate derivative of a phenolic hydroxy compound according to claim 3 ~~any one of claims 1 to 8 when used as an anaesthetic~~.

25. (Currently amended) A method for improving the bioavailability of a phenolic hydroxy compound comprising the following steps:

(a) reacting the phenolic hydroxy compound with an alkyl α:ω dialdehyde or a sugar-like polyhydroxy dialdehyde to form a hemiacetal;

(b) reducing the terminal aldehyde group on the product from step (a) to a hydroxyl group; and

(c) phosphorylating the hydroxyl group formed in step (b) to produce a phosphate derivative ~~of the phenolic hydroxy compound.~~ having the structure of Compound (II)



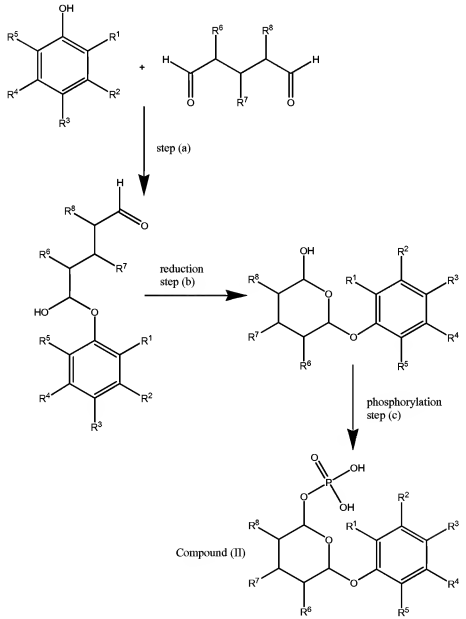
wherein R^1, R^2, R^3, R^4 and R^5 are each independently H or an alkyl group and R^6, R^7 and R^8 are each independently H or OH.

26. (New) The phosphate derivative of a phenolic hydroxy compound according to claim 3 wherein Compound (II) is 2-(2,6-diisopropylphenoxy)-tetrahydropyran-6-yl, dihydrogen phosphate, or 2-(2,6-diisopropylphenoxy)-3,4,5-trihydroxy tetrahydropyran-6-yl, dihydrogen phosphate.

27. (New) The phosphate derivative of a phenolic hydroxy compound according to claim 4 wherein the Compound (II) complex is arginine 2-(2,6-diisopropylphenoxy)-3,4,5-

trihydroxytetrahydropyran-6-yl dihydrogen phosphate complex, arginine 2-(2,6-diisopropylphenoxy)-tetrahydropyran-6-yl dihydrogen phosphate complex, or disodium lauryl-imino-dipropionate-2-(2,6-diisopropylphenoxy)-tetrahydropyran-6-yl dihydrogen phosphate complex.

28. (New) The method according to claim 11 comprising the following reaction:



wherein R^1, R^2, R^3, R^4 and R^5 are each independently H or an alkyl group; R^6, R^7 and R^8 are

each independently H or OH; and n and m are each independently in the range of 0 to 8.

29. (New) The method according to claim 28 wherein Compound (II) is 2-(2,6-diisopropylphenoxy)-tetrahydropyran-6-yl, dihydrogen phosphate, or 2-(2,6-diisopropylphenoxy)-3,4,5-trihydroxy tetrahydropyran-6-yl, dihydrogen phosphate.

30. (New) The phosphate derivative of a phenolic hydroxy compound according to claim 15 wherein the Compound (II) complex is arginine 2-(2,6-diisopropylphenoxy)-3,4,5-trihydroxy tetrahydropyran-6-yl dihydrogen phosphate complex, arginine 2-(2,6-diisopropylphenoxy)-2-hydroxy ethylphosphate complex, arginine 2-(2,6-diisopropylphenoxy)-3,4,5-trihydroxytetrahydropyran-6-yl dihydrogen phosphate complex, arginine 2-(2,6-diisopropylphenoxy)-2-hydroxy ethylphosphate complex, or arginine 2-(2,6-diisopropylphenoxy)-tetrahydropyran-6-yl dihydrogen phosphate complex.

31. (New) The phosphate derivative of a phenolic hydroxy compound according to claim 16 wherein the Compound (II) complex is arginine 2-(2,6-diisopropylphenoxy)-3,4,5-trihydroxytetrahydropyran-6-yl dihydrogen phosphate complex, arginine 2-(2,6-diisopropylphenoxy)-tetrahydropyran-6-yl dihydrogen phosphate complex, or disodium lauryl-imino-dipropionate-2-(2,6-diisopropylphenoxy)-tetrahydropyran-6-yl dihydrogen phosphate complex.

32. (New) The method according to claim 11 wherein the phenolic hydroxy compound is selected from the group consisting of adrenaline, analgesics, and mixtures thereof.